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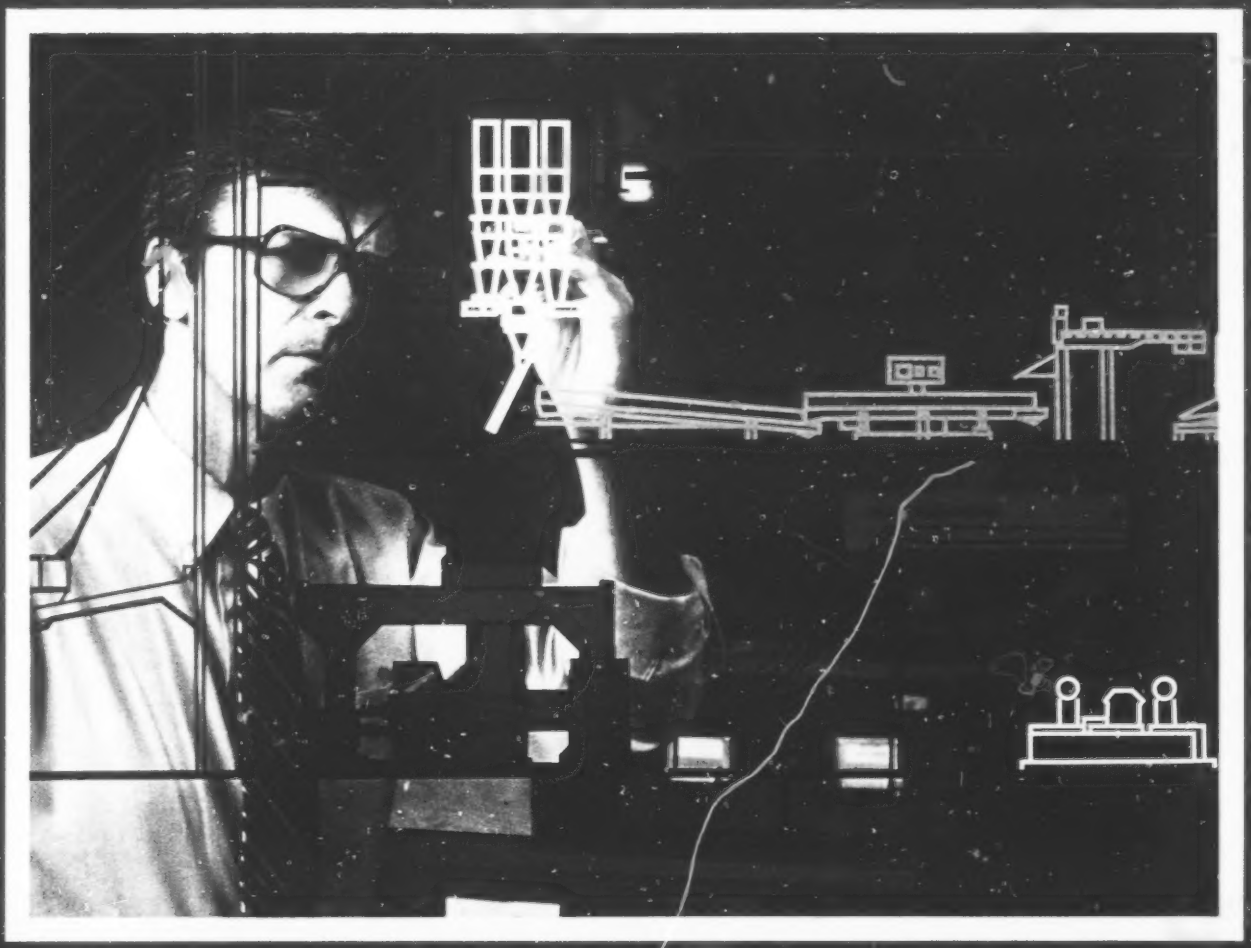
Machinery & equipment



Injection molding of elastomers

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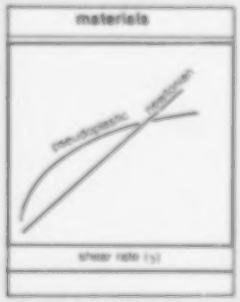

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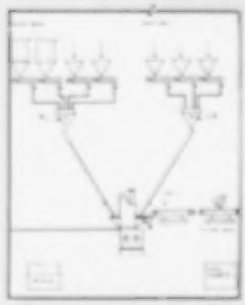

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Courtesy of Contract-Engineering Division, Farrel Company, Emhart Machinery Group

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Processing machinery imports increasing

The strong U.S. dollar was made evident again with the latest release from the government concerning the imports and exports of machinery used for molding and forming rubber and plastic articles. Based on dollar amounts, imports of injection molding machinery more than doubled in 1984 while imports of extrusion machines increased 74%. Although imports of tire forming machines declined in 1984, for the third year in a row, statistics for the first quarter of 1985 show imports running 1½ times more than the same period in 1984.

More than $131 million worth of injection molding machinery was imported into the U.S. in 1984 compared to $60.4 million the previous year. First quarter 1985 statistics show the trend continuing as these imports are running 20% higher than in 1984. Exports of injection molding machines is also on the increase. After a four year downward slide, exports increased to $19 million in 1984 compared to $11.7 million in 1983, but still way below the $46.1 million registered in 1980. First quarter figures show 1985 is more than 2½ times more than 1984's figures.

U.S. exports of extrusion machinery historically outstripped imports until 1982. But imports now are way ahead, totalling $34.5 million in 1984 compared to $13.8 million for exports. The import rate doubled for the first quarter of 1985 compared to the first quarter of 1984 and even though exports increased as well, the gap is increasing between the two. First quarter results for 1985 show imports of extrusion equipment have doubled over 1984 to $14.4 million while exports increased almost 50% to $5.4 million.

The U.S. has always been a leader in tire forming machinery, but the strong dollar coupled with the weakened economies of many of the major trading countries have led to continued declines in exports since 1979 when the dollar volume reached $40.6 million. Exports dropped to $19.8 million in 1983, with a slight increase in 1984 projected, but final figures for that year are unavailable. First quarter 1985 shipments are 43% below 1984. Imports of tire making machinery increased from 1979 to 1981 but then took a big dip the next three years, bottoming out to $7.1 million in 1984 compared to $44.5 million in 1981. Much of the earlier figures are attributed to the fact that several foreign tire makers set up manufacturing facilities in the U.S. and imported machinery. Also keeping imports down is the fact that many U.S. manufacturers of tire making machinery license a number of foreign producers, most of which are prohibited to export to the U.S. under terms of the agreement.

The major foreign supplier of rubber machinery is West Germany, ac-

Injection-molding machines used for processing rubber and plastics articles: U.S. imports for consumption, by principal sources, (in thousands of dollars)

Source	1979	1980	1981	1982	1983	1984
Fr. Germ	25,141	20,509	19,632	14,433	20,527	36,482
Canada	10,280	11,130	11,804	11,917	16,018	34,107
Japan	14,469	13,645	12,598	10,536	14,113	40,634
Italy	5,471	3,824	3,769	2,470	3,336	5,976
Austria	1,117	530	215	554	1,628	6,130
France	4,394	2,524	3,986	2,406	1,465	2,403
Austral.	258	913	517	—	1,325	—
Switzld.	389	734	1,531	961	1,077	3,458
Ireland	5	—	—	11	152	—
U. King.	958	1,251	632	316	150	398
All other	703	342	2,021	1,417	624	570
Total	63,183	56,403	56,505	45,023	60,416	131,075

Source: Compiled from official statistics of the U.S. Department of Commerce.

Machines used for molding or forming pneumatic tires and parts thereof: U.S. imports for consumption, by principal sources, (in thousands of dollars)

Source	1979	1980	1981	1982	1983	1984
Canada	1,095	1,339	1,642	1,267	1,591	256
Japan	62	907	6	96	1,547	3,269
Fr. Germ.	1,624	416	757	1,038	1,543	1,474
France	25,737	29,150	39,810	12,475	1,522	573
Italy	607	2,071	940	579	537	207
Denmark	49	49	446	505	529	23
Nethlds.	6	—	1	76	501	1,194
U. King.	1,065	1,236	693	326	406	75
Belgium	129	69	112	33	155	—
Switzld.	46	4	2	109	64	—
All other	48	320	218	196	71	—
Total	30,469	35,561	44,626	16,696	8,466	7,093

Source: Compiled from official statistics of the U.S. Department of Commerce.

Extrusion machines used for processing rubber and plastics articles: U.S. imports for consumption, (in thousands of dollars)

Source	1979	1980	1981	1982	1983	1984
Fr. Germ	11,319	15,776	13,863	16,228	11,655	22,562
Italy	1,211	1,379	5,026	2,749	1,815	4,349
Canada	1,208	744	856	1,080	1,738	1,689
U. King.	500	567	494	2,628	1,361	426
France	3,504	253	479	345	823	1,470
China	115	58	89	179	795	607
Japan	1,108	2,942	4,260	1,521	634	2,281
Switzld.	7	554	515	—	326	—
Austria	406	272	632	80	271	332
Hg. Kong	41	26	—	35	155	—
All other	716	788	3,346	3,942	333	346
Total	20,134	23,367	29,561	27,886	19,906	34,571

Source: Compiled from official statistics of the U.S. Department of Commerce.

U.S. imports/exports of machines used for molding or otherwise forming rubber or plastic articles and parts thereof: (in thousands of dollars)

	1979	1980	1981	1982	1983	1984	First Quarter 1984	First Quarter 1985
Injection molding machinery imports	63,183	55,403	56,505	45,023	60,416	131,075	29,020	35,497
Exports	29,021	46,160	45,075	27,833	11,795	19,612	3,124	6,392
Extrusion machinery imports	20,134	23,357	29,561	27,886	19,906	34,571	7,010	14,402
Exports	25,522	36,171	34,361	24,613	13,774	13,864	3,693	5,440
Tire forming machinery imports	30,489	35,561	44,526	16,698	8,466	7,093	4,816	
Exports	40,592	39,264	34,244	33,156	19,865	NA	6,288	3,564

counting for nearly 40% of the imports. Canada and Japan were next, both combining for nearly 36% of the machines imported. France accounted for about 80% of the tire forming machines imported into the U.S. in the years 1979-1981, reflecting the decision by Michelin to build tires in the U.S. France's imports of these machines in 1983 were 85% less than that of 1981.

Breakdown of leading importers by types of machinery show Germany, Canada and Japan the leading injection molding importers, the same three along with France for tire making machinery and Germany the largest exporter to the U.S. of extrusion equipment followed by Italy, Canada and the United Kingdom.

The pattern of U.S. exports for this machinery shows a high of $341.6 million in 1981 before the reversal brought upon by the worldwide recession. Injection molding machine exports dropped 58% by 1983 and extrusion machines declined 43%. Canada, Mexico and the United Kingdom account for nearly 40% of the total U.S. exports of rubber and plastics machinery. Canada and Mexico are the top markets for injection molding equipment and extrusion machines along with India and the United Kingdom.

Injection-molding machines used for processing rubber and plastics articles: U.S. exports of domestic merchandise, by principal markets, (in thousands of dollars)

Market	1979	1980	1981	1982	1983
Canada	10,146	15,327	15,003	5,934	3,738
Mexico	3,996	8,081	13,447	10,799	3,138
Colomb	1,596	1,433	323	2,539	844
China	460	237	637	1,934	766
Singapr	135	85	—	228	535
Australia	310	578	986	644	522
Jamaica	7	—	—	—	445
Fr. Germ.	257	1,737	215	50	322
France	109	865	1,314	825	240
Venez.	2,965	1,490	2,426	1,641	231
All other	9,041	16,329	10,723	3,239	1,011
Total	29,021	46,160	45,075	27,833	11,795

Source: Compiled from official statistics of the U.S. Department of Commerce

Extrusion machines used for processing rubber and plastics articles: U.S. exports of domestic merchandise, by principal markets, (in thousands of dollars)

Market	1979	1980	1981	1982	1983
Canada	4,704	3,688	5,966	3,804	3,570
Mexico	2,750	4,769	7,765	7,299	1,705
India	592	2,451	1,995	159	1,546
U King	3,616	2,567	3,702	1,562	1,153
Venez	304	3,222	424	779	883
Zimbabw	—	—	—	—	569
Hg. Kong	13	13	11	301	434
Austral	1,123	683	1,524	1,667	379
Israel	163	77	159	393	358
Japan	315	677	1,277	673	347
All other	11,941	18,046	11,539	7,775	2,810
Total	25,522	36,171	34,361	24,613	13,774

Source: Compiled from official statistics of the U.S. Department of Commerce

Today, thanks partly to the efforts of the American Heart Association, the death rate from rheumatic heart disease has declined more than 70 percent since 1950.

For decades, the American Heart Association's educational programs have taught parents about the dangers and prevention of rheumatic fever and rheumatic heart disease in young children.

The effort was worth it.

Your gift to the American Heart Association can mean life and hope for many. Perhaps someone close to you.

Support the American Heart Association. We're fighting for your life.

American Heart Association

WE'RE FIGHTING FOR YOUR LIFE